

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method of testing browser software in a computer environment, the method comprising the steps of:

generating a list of URLs (Universal Resource Location) using a web crawler;

applying a browser test script, wherein said browser test script automatically instructs a first browser program containing said browser software

5 to load and render web pages according to the list of URLs, wherein said browser test script tests said browser software over a plurality of applications at sites contained within the list of URLs;

detecting one or more browser rendering errors in rendering of said first browser program using the web pages by comparing a representation of

10 rendering results of the first browser program to a representation of rendering results of a second browser program, wherein a representation of rendering results of a browser program comprises an internal representation of a web page as interpreted by the browser program, wherein the internal representation includes a list of objects to be displayed for the web page and the attributes of 15 the objects, and wherein the attributes and the objects that are uniquely defined by the web page are compared to ensure that there is no glitch in interpreting the information defining the web page; and

wherein one or more errors are detected when the representation of rendering results of the first browser program does not match the representation

20 of rendering results of the second browser program; and

automatically storing information about said one or more errors;

wherein said step of applying a browser test script is performed while said first browser program is under development and prior to distribution.

2. (Original) The method of Claim 1, wherein the one or more errors include

a crash of the first browser program in rendering one of the web pages.

3. (previously presented) The method of Claim 1, wherein said browser test script automatically instructs said second browser program load and render the web pages.

4. (cancelled)

5. (cancelled)

6. (cancelled)

7. (previously presented) The method of Claim 1, wherein the internal representation of the web page comprises attributes of the web page, including:

a background color;

a number of columns of a table; and

a number of rows of a table.

5

8. (Original) The method of Claim 1, further comprising the step of:

automatically restarting the first browser program after a crash of the first browser program in rendering one of the web pages.

10 9. (previously presented) The method of Claim 1, further comprising the step of avoiding duplicated visits to a same URL.

10. (Original) The method of Claim 1, wherein a number of URLs are removed

from the URLs reported by the web crawler to generate the list of URLs.

11. (currently amended) An apparatus of testing browser software in a computer environment, comprising:

at least one processor programmed to provide:

5 a plurality of software modules, said plurality of software modules including:

a module for generating a list of URLs (Universal Resource Location) using a web crawler;

a browser test script module, wherein said browser test script module automatically instructs a first browser program containing said browser software to load and render web pages according to the list of URLs, wherein said browser test script tests said browser software over a plurality of applications at sites contained within the list of URLs;

a module for detecting one or more browser rendering errors ~~in rendering~~ of said first browser program to a representation of rendering results of a second browser program, wherein a representation of rendering results of a browser program comprises an internal representation of a web page as interpreted by the browser program, wherein the internal representation includes a list of objects to be displayed for the web page and the attributes of the objects, and wherein the attributes and the objects that are uniquely defined by the web page are compared to ensure that there is no glitch in interpreting the information defining the web page; and

wherein one or more errors are detected when the representation of rendering results of the first browser program does not match the representation of rendering results of the second browser program; and

a module for automatically storing information about said one or more errors;

said apparatus further comprising at least one computer, wherein said plurality of software modules are executed on said at least one computer;

wherein said first browser program is under development prior to distribution of said browser program.

12. (Original) The apparatus of Claim 11, wherein the one or more errors include a crash of the first browser program in rendering one of the web pages.

13. (currently amended) The apparatus of Claim 11, wherein said browser test script module automatically instructs the second browser program to load and render the web pages.

14. (cancelled)

15. (cancelled)

16. (cancelled)

17. (previously presented) The apparatus of Claim 11, wherein the internal representation of the web page comprises attributes of the web page, including:

a background color;
a number of columns of a table; and
a number of rows of a table.

18. (Original) The apparatus of Claim 11, further comprising:
a module for automatically restarting the first browser program after a

crash of the first browser program in rendering one of the web pages.

19. (Original) The apparatus of Claim 11, further comprising a module for avoiding duplicated visits to a same URL.

20. (Original) The apparatus of Claim 11, wherein a number of URLs are removed from the URLs reported by the web crawler to generate the list of URLs.

21. (currently amended) A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform a method for testing browser software in a computer environment, the method comprising the steps of:

generating a list of URLs (Universal Resource Location) using a web crawler;

applying a browser test script, wherein said browser test script automatically instructs a first browser program containing said browser software to load and render web pages according to the list of URLs, wherein said browser test script tests said browser software over a plurality of applications at sites contained within the list of URLs;

detecting one or more browser rendering errors ~~in rendering~~ of said first browser program using the web pages by comparing a representation of rendering results of the first browser program to a representation of rendering results of a second browser program, wherein a representation of rendering results of a browser program comprises an internal representation of a web page as interpreted by the browser program, wherein the internal representation includes a list of objects to be displayed for the web page and the attributes of the objects, and wherein the attributes and the objects that are uniquely defined by the web page are compared to ensure that there is no glitch in interpreting the information defining the web page; and

wherein one or more errors are detected when the representation of rendering results of the first browser program does not match the representation of rendering results of the second browser program; and

automatically storing information about said one or more errors;

wherein said step of applying a browser test script is performed while said first browser program is under development and prior to distribution.

22. (Original) The medium of Claim 21, wherein the one or more errors include a crash of the first browser program in rendering one of the web pages.

23. (previously presented) The medium of Claim 21, wherein said browser test script automatically instructs the second browser program to load and render the web pages.

24. (cancelled)

25. (cancelled)

26. (cancelled)

27. (previously presented) The medium of Claim 20, the internal representation of the web page comprises attributes of the web page, including:

a background color;

a number of columns of a table; and

a number of rows of a table.

28. (Original) The medium of Claim 21, the method further comprising the step of:

automatically restarting the first browser program after a crash of the first browser program in rendering one of the web pages.

29. (Original) The medium of Claim 21, the method further comprising the step of avoiding duplicated visits to a same URL.

30. (Original) The medium of Claim 21, wherein a number of URLs are removed from the URLs reported by the web crawler to generate the list of URLs.

31. (cancelled)

32. (cancelled)